

## **Fact Sheet: Groundwater Sampling Program**

### **Summary**

- Dana Corporation – the former owner of the Warner Electric Facility in Roscoe – plans to test the groundwater under the Honenegah Country Estates and the Moore Haven subdivisions. The purpose of the testing is to evaluate the success of the on-going effort to clean up chlorinated solvents in the groundwater beneath the subdivisions. In addition, Dana plans to evaluate the air quality at some homes in the area to determine whether vapors from the affected groundwater are present in area homes.

### **Background**

- In 1983, affected groundwater was discovered around the Warner Electric facility in Roscoe. The affected groundwater plume extended 6,000 feet in a relatively narrow band from the facility, under parts of the Honenegah Country Estates and Moore Haven subdivisions, toward the Rock River.
- The groundwater contains chlorinated solvents that were used at the Warner facility. Chlorinated solvents are a common industrial chemical, historically used to remove oil from metal parts.
- When affected groundwater was discovered, the owners of the Warner facility at that time started clean up efforts under the supervision of the Illinois and U.S. Environmental Protection Agencies. These efforts included providing clean drinking water for area residents, treating the affected groundwater and groundwater monitoring.
- In 1985, the Dana Corporation purchased the Warner Electric facility and “inherited” the responsibility for the clean up effort. Although Dana sold the facility in 1999, it has agreed to continue its oversight and funding of the remediation.

### **Groundwater Testing Program**

- Monitoring of the fifteen year clean up effort shows that progress is being made: the concentrations of solvents in the groundwater have decreased significantly. For example, the maximum concentration of trichloroethene (or TCE, one of the most commonly used chlorinated solvents), at monitoring well N1-60, where the highest concentrations have been measured beneath the Hononegah Country Estates, is now about 20 times lower than they were in 1987.
- To evaluate the success of the remediation effort to this point, and what next steps are necessary in the clean up effort, more in-depth testing needs to be conducted.
- Dana will collect groundwater samples at different depths from nine separate locations within the aquifer under the Hononegah Country Estates and Moore Haven subdivisions.
- Dana is working in cooperation with the USEPA to conduct the groundwater testing.

### **Indoor Air Testing**

- Recent case studies performed elsewhere in the nation suggest that groundwater containing chlorinated solvents *may*, under certain circumstances, impact indoor air quality in nearby buildings. There is no evidence that vapors from the affected groundwater beneath Hononegah Country Estates and Moore Haven subdivisions are present within area homes. However, Dana and the EPA believe it makes sense to gather the information necessary to evaluate this possible concern.
- As a precautionary measure, Dana, at the request of USEPA, will test the air quality in selected homes to determine if vapors from the affected groundwater are present in area homes.

**For More Information**

- For additional information contact either the US EPA (Chris Black) at 312-886-1451 [email: [black.christopher@epa.gov](mailto:black.christopher@epa.gov)] or Dana Corporation (Paul Renberg) at 419-535-4773 [email: [paul.renberg@dana.com](mailto:paul.renberg@dana.com)].

## **Questions and Answers: The Roscoe Groundwater and Air Sampling Project**

### **Summary**

Dana Corporation – the former owner of the Warner Electric Facility in Roscoe – is testing the groundwater under the Honenegah Country Estates and the Moore Haven subdivisions. The purpose of the testing is to evaluate the success of the on-going effort to clean up chlorinated solvents in the groundwater beneath the subdivisions. In addition, Dana plans to evaluate the air quality in some homes in the area to determine whether vapors from the affected groundwater are present in area homes.

### **Background Information**

Q. Where is the groundwater affected? What was the cause?

A. The groundwater is affected in an area SSW of the Warner Electric Facility. In 1983 the Illinois Public Health Department discovered that the shallow groundwater downgradient of the Warner Electric facility and beneath portions of the Honenegah Country Estates and Moore Haven subdivisions contained chlorinated solvents. The source of the solvents appears to have been the release of chlorinated solvents at the Warner facility, which eventually seeped through the ground and into the area's groundwater.

Q. What are chlorinated solvents?

A. Chlorinated solvents, particularly trichloroethene (TCE), are industrial chemicals that are commonly used as a degreaser of metal parts. In high enough concentrations they can be dangerous to human health. The use of chlorinated solvents is decreasing as other alternatives become available.

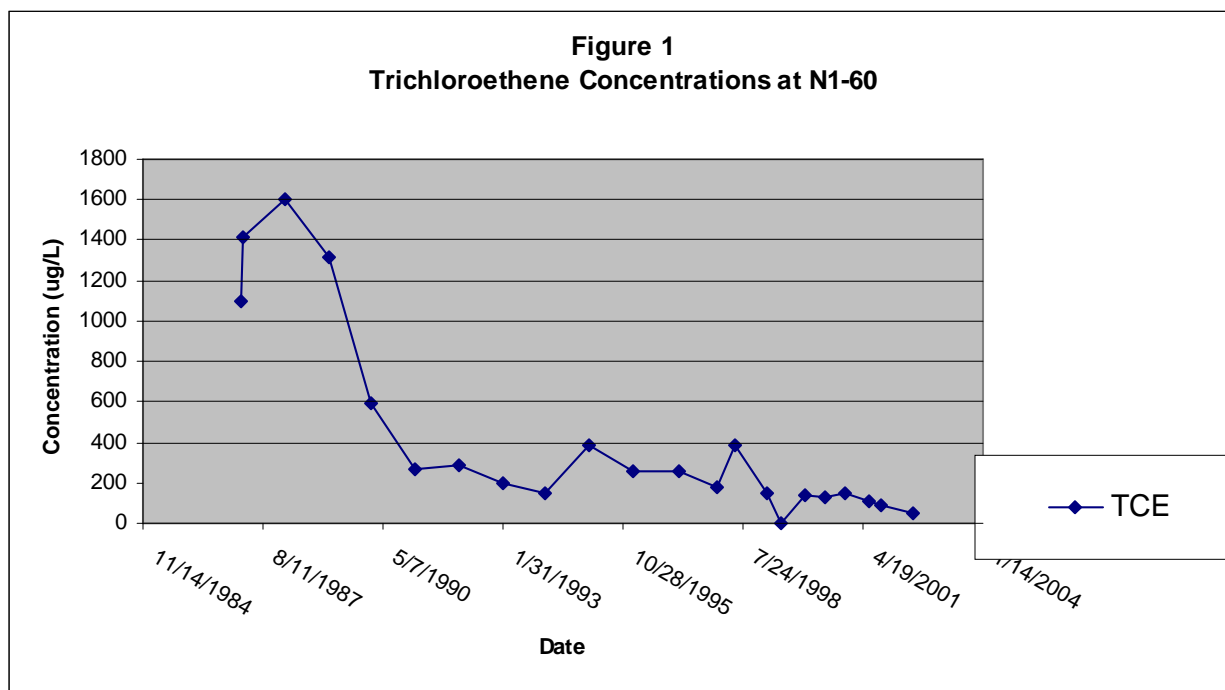
Q. What is being done about the affected groundwater?

A. After the affected groundwater was discovered, Warner Electric and subsequently Dana initiated a program to provide clean drinking water to area residents, clean up the affected groundwater and monitor the groundwater. This program continues today under the supervision of the U.S. and Illinois Environmental Protection Agencies.

Q. Who is Dana? Why are they involved?

A. Dana Corporation is an automotive parts supplier. Dana purchased the Warner Electric facility in 1985 and "inherited" the environmental problems associated with that facility. Dana agreed to a program to clean up the affected groundwater related to the facility and continues to honor that agreement, even after it sold the facility in 1999.

- Q. Am I at risk because of the affected groundwater?
- A. You are not at risk from exposure to the affected groundwater. Because the homes in both subdivisions are supplied with water by the municipal system that gets its water from a different aquifer, there is no danger of either direct contact or ingestion of the solvent affected water from the shallow aquifer. However, there is a small possibility that vapors from the shallow aquifer could enter some homes. That possibility is the reason we plan to test the air in selected homes.
- Q. What progress is being made on the clean up?
- A. Over the last fifteen years, the concentrations or levels of chlorinated solvents in the groundwater have steadily and significantly declined. For example, the concentrations of trichloroethene (TCE) at monitoring N1-60, where the highest concentrations have been measured beneath the Hononegah Country Estates, are now about 20 times lower than they were in 1987. See the graph below.



### **The New Groundwater Sampling Program**

- Q. Why is Dana conducting new tests?
- A. Dana and the EPA would like to evaluate how successful the fifteen-year clean up effort has been to this point and then decide what next steps are necessary. To do that, more information must be gathered from the area.
- Q. How will the groundwater sampling be conducted?

- A. Dana will use a drill rig to collect groundwater samples at different depths from nine separate locations within the shallow aquifer under the Hononegah Country Estates and Moore Haven subdivisions. Dana is cooperating and consulting with the EPA as they implement the testing program.
- Q. Will groundwater sampling be done on a homeowner's property?
- A. No. Dana plans to drill only in the Right-of-Way associated with the road. However, we recognize that still may cause inconvenience and concern because the right-of-way is so close to many homes and front yards. For that reason, Dana intends to discuss its plans with the affected homeowners. Every effort will be made to ensure that the drilling will be conducted in a manner which attempts to minimize any inconvenience to the nearby homeowners.

### **Indoor Air Testing**

- Q. Why will the indoor air quality of some homes be tested?
- A. After a request by USEPA, Dana voluntarily agreed to test the air in selected homes for the presence of vapors that may be associated with the affected groundwater. There have been some recent case studies elsewhere in the nation that suggest contaminated groundwater can impact indoor air quality. There is no evidence of that in this case, but it still makes sense to gather the information necessary to eliminate this as a possible concern.
- Q. Which homes will be selected for indoor air testing? What is the test?
- A. Homes in and around the area of affected groundwater will be selected based on our analysis of the information we collect during the drilling program. The test requires placing a small canister in the home for a few days. The canister is then analyzed to determine what chemicals -- and in what amounts -- are present in the air of the home.
- Q. May a homeowner decline to have their home tested?
- A. Yes. Only homeowners who voluntarily participate will have their home tested.

### **More Information**

- Q. What if I need more information?
- A. For additional information contact either the US EPA (Chris Black) at 312-886-1451 [[email:black.christopher@epa.gov](mailto:black.christopher@epa.gov)] or Dana Corporation (Paul Renberg at 419-535-4773 [[email: paul.renberg@dana.com](mailto:paul.renberg@dana.com)]).